

CLAIMS

What is Claimed Is:

- 1 1. A method of recording compatibility information on a recording medium,
2 comprising:
3 providing a physical format information zone having a reserved zone; and
4 recording extended part version information in the reserved zone of the physical
5 format information zone, said recording of the extended part version information comprising
6 recording a detailed extended part version comprising a primary digit in the reserved zone.
7
- 8 2. The method of claim 1, wherein the recording of the extended part version
9 information further comprises recording a latest part version having recording compatibility
10 with a recording/reproducing apparatus of a given specification level in the reserved zone.
11
- 12 3. The method of claim 2, wherein the recording of the extended part version
13 information further comprises recording a latest part version having reproducing compatibility
14 with the recording/reproducing apparatus in the reserved zone.
15
- 16 4. The method of claim 3, wherein the recording of the latest part version having
17 recording compatibility with the recording/reproducing apparatus, and the recording of the
18 latest part version having reproducing compatibility with the recording/reproducing apparatus,
19 each further comprise recording a primary digit in the reserved zone.
20
- 21 5. The method of claim 4, wherein the recording of the detailed extended part version,
22 the recording of the latest part version having recording compatibility with the
23 recording/reproducing apparatus, and the recording of the latest part version having
24 reproducing compatibility with the recording/reproducing apparatus each further comprise
25 recording a first sub-digit immediately after the first decimal place.

1 6. The method of claim 5, further comprising recording said primary digit, and said
2 first sub-digit in the form of n.x.

1 7. The method of claim 6, wherein n represents a specification change, and x
2 represents a specification change having no compatibility with the recording/reproducing
3 apparatus.

1 8. The method of claim 7, further comprising recording non-extended part version
2 information in an unreserved zone of the physical format information zone, wherein said
3 non-extended part version information indicates that the extended part version information is
4 recorded in a different location.

1 9. A recording medium comprising:
2 a physical format information zone having a reserved zone; and
3 extended part version information in the reserved zone of said physical format
4 information zone, said extended part version comprising a detailed extended part version
5 comprising a primary digit.

1 10. The recording medium of claim 9, wherein said extended part version information
2 further comprises a latest part version having recording compatibility with a
3 recording/reproducing apparatus of a given specification level.

4
5 11. The recording medium of claim 10, wherein said extended part version information
6 further comprises a latest part version having reproducing compatibility with the
7 recording/reproducing apparatus.

1 12. The recording medium of claim 11, wherein said latest part version having
2 recording compatibility with the recording/reproducing apparatus, and said latest part version

3 having reproducing compatibility with the recording/reproducing apparatus each further
4 comprise a primary digit.

1 13. The recording medium of claim 12, wherein said detailed extended part version,
2 said latest part version having recording compatibility with the recording/reproducing
3 apparatus, and said latest part version having reproducing compatibility with the
4 recording/reproducing apparatus each further comprise a first sub-digit.

1 14. The recording medium of claim 13, wherein said primary digit and said first sub-
2 digit are in the format n.x.

1 15. The recording medium of claim 14, wherein n represents a specification change,
2 and x represents a specification change having no compatibility with the recording/reproducing
3 apparatus.
4

1 16. The recording medium of claim 15, wherein said reserved zone is 6 bytes in size,
2 and said detailed extended part version, said latest part version having recording compatibility
3 with the recording/reproducing apparatus, and said latest part version having reproducing
4 compatibility with the recording/reproducing apparatus, are each 2 bytes in size.
5

1 17. The recording medium of claim 16, wherein said primary digit and said first sub-
2 digit are each 4 bits in size.

1 18. The recording medium of claim 17, wherein said physical format information zone
2 further comprises an unreserved part version zone 4 bits in size, wherein said unreserved part
3 version zone is located at a byte position 0 of said physical format information zone, and said
4 reserved zone of said physical format information zone is located at a byte position 17 through
5 a byte position 22 of said physical format information zone.

1 19. The recording medium of claim 18, wherein said detailed extended part version is
 2 located at said byte position 17 through a byte position 18 of said physical format information
 3 zone, said latest part version having recording compatibility with the recording/reproducing
 4 apparatus is located at a byte position 19 through a byte position 20 of said physical format
 5 information zone, and said latest part version having reproducing compatibility with the
 6 recording/reproducing apparatus is located at a byte position 21 through said byte position 22
 7 of said physical format information zone.

1 20. The recording medium of claim 19, wherein said primary digit is located at a bit 4
 2 through a bit 7 of said byte positions 17 through 22 of said physical format information zone,
 3 and said first sub-digit is located at a bit 0 through a bit 3 of byte positions 17 through 22 of
 4 said physical format information zone.

1 21. The recording medium of claim 20, wherein the recording medium is a digital
 2 versatile disc (DVD).

1 22. A method of determining compatibility between a recording medium and a
 2 recording/reproducing apparatus, comprising:
 3 installing said recording medium in said recording/reproducing apparatus;
 4 comparing a base part version of the recording/reproducing apparatus with a detailed
 5 extended part version stored in a reserved zone of a physical format information zone of said
 6 recording medium; and
 7 determining recording compatibility based upon said step of comparing said base part
 8 version with said detailed extended part version,
 9 wherein said detailed extended part version is recorded in the form of n.x.

1 23. A method of determining compatibility between a reproducing medium and a
 2 recording/reproducing apparatus, comprising:
 3 installing said reproducing medium in said recording/reproducing apparatus;

4 comparing a base part version of the recording/reproducing apparatus with a detailed
 5 extended part version stored in a reserved zone of a physical format information zone of said
 6 reproducing medium; and
 7 determining reproducing compatibility based upon said step of comparing said base part
 8 version with said detailed extended part version
 9 wherein said detailed extended part version is recorded in the form of n.x.

1 24. The method of claim 22, wherein said comparing of said base part version with
 2 said detailed extended part version further comprises comparing said base part version with a
 3 latest part version having recording compatibility with the recording/reproducing apparatus
 4 stored in said reserved zone.

5 25. The method of claim 23, further comprising:
 6 comparing said base part version with a latest part version having reproducing
 7 compatibility with the recording/reproducing apparatus stored in said reserved zone; and
 8 determining a reproducing compatibility between the recording medium and the
 9 recording/reproducing apparatus based upon said step of comparing said base part version with
 10 said latest part version having reproducing compatibility with the recording/reproducing
 11 apparatus.

12 26. The method of claim 25, wherein said reserved zone is 6 bytes in size, and said
 13 latest part version having recording compatibility with the recording/reproducing apparatus,
 14 and said latest part version having reproducing compatibility with the recording/reproducing
 15 apparatus are each in the form of n.x, wherein n represents a specification change, and x
 16 represents a specification change having no compatibility with the recording/reproducing
 17 apparatus.

1 27. The method of claim 26, wherein said reserved zone is located at a byte position
 2 17 through a byte position 22 of said recording medium.

1 28. The method of claim 25, wherein if the determining of the recording compatibility
2 indicates that there is recording compatibility, then recording is permitted, and if the
3 determining of the recording compatibility indicates that there is not recording compatibility,
4 then recording is prohibited;

5 and if the determining of the reproducing compatibility indicates that there is
6 reproducing compatibility, then the reproducing is permitted, and if the determining of the
7 reproducing compatibility indicates that there is not reproducing compatibility, then
8 reproducing is prohibited.

1 29. A recording/reproducing apparatus, comprising:

2 a control unit to record extended part version information in a reserved zone of a
3 physical format information zone of a recording medium, and

4 a reading unit to read the extended part version information from the recording
5 medium, wherein the extended part version information in the reserved zone comprises a
6 primary digit.

1 30. The recording/reproducing apparatus of claim 29, wherein the extended part
2 version information comprises a detailed extended part version.

3 31. The recording/reproducing apparatus of claim 30, wherein the extended part
4 version information further comprises a latest part version having recording compatibility with
5 the recording/reproducing apparatus in the reserved zone.

1 32. The recording/reproducing apparatus of claim 31, wherein the extended part
2 version comprises a latest part version having reproducing compatibility with the
3 recording/reproducing apparatus.

1 33. The recording/reproducing apparatus of claim 32, wherein the extended part
2 version information in the reserved zone comprises a first sub-digit immediately after said
3 primary digit.

1 34. The recording/reproducing apparatus of claim 33, wherein the control means
2 records said primary digit, and said first sub-digit in the form n.x.

1 35. The recording/reproducing apparatus of claim 34, wherein n represents a
2 specification change, and x represents a specification change having no compatibility with the
3 recording/reproducing apparatus.

4 36. The recording/reproducing apparatus of claim 35, wherein said detailed extended
5 part version further comprises a latest part version having recording compatibility, and the
6 comparing unit compares said base part version with said detailed extended part version by
7 comparing said base part version with the latest part version having recording compatibility
8 with the recording/reproducing apparatus stored in said reserved zone.

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